PROTECTION IN SOFTWARE: COPYRIGHT OR PATENT

Sonia Jain

Research Scholar, Department of Laws, Panjab University, Chandigarh.

ABSTRACT

This paper provides an analytical overview of how software industry may be promoted or hindered by an effective system of intellectual property rights (IPRs) which ultimately enjoins economic development of the country. Increasingly software is being described as a collection of processes, as a unique machine, or both, enabling the protection of the inventive concepts behind an original program. The potential gains and losses depend on the competitive structure of markets and the efficiency of related business regulation, including technology development policy. Overall, there is a positive impact on growth in age of internet, but this impact depends on the competitive nature of the economy. The paper concludes by putting forward suggestions for protection of software technology by patenting or copyright tools.

INTRODUCTION

Modern society relies heavily on computer technology. The Internet too cannot exist without software and using Internet is now tailored and exploited with the help of various applications. Software is intangible and modular. Computer software as a product of inventive effort is nearly 50 years old, but the application of intellectual property rights to these products is relatively recent. The intellectual property protection of computer software has been highly debated at the national and international level. Traditionally, the most common route of software protection has been copyright. In the cyberspace era, for this type of protection, Software patents are also becoming more popular; it is worth examining which form of protection is most sensible for program.

PROTECTION OF SOFTWARE

In many countries, computer programs, whether in source or object code, are protected under copyright. But with the recent development the protection of software has been extended under the area of Patent as well.

COPYRIGHT IN SOFTWARE

A copyright protects an original work in the tangible, fixed form in which it has been set down. It protects only the expression of the work, and not the idea underlying the work. The primary purpose of copyright is to promote the exchange of information and advancement of ideas that may benefit society. The protection of an author's interest in his creative work is also an aim of copyright. A copyright holder has the exclusive right to make copies, prepare derivative works, and distribute copies of the work for the duration of the author's life plus seventy years. An original work in software is legally protected. Registration establishes considerable legal advantage in the event of an infringement suit.

The major advantage of copyright protection lies in its simple procedure of protection. Copyright protection does not depend on any formalities such as registration or the deposit of copies in rest of the countries. The member of the Berne Convention for the Protection of Literary and Artistic Works, 1886 gets the international copyright protection automatically, which begins as soon as a work is created.[1]

PATENT FOR SOFTWARE

In last few years' strong protection for intellectual property rights, copyright protection for software-related intellectual property has been supplemented, and appears to have been supplanted, by patent protection.[2] Patents were not originally preferred for protection of software-related intellectual property, it was considered as a matter of the copyright because of the nature of the product as related to the literary work of the author. Patentability of Computer-implemented Inventions has been introduced in order to harmonize the interpretation of the national patentability requirements for computer software-related inventions, including the business methods carried out via the computer. Patent protection is provided on a country to country basis, because no proper law has been envisaged till date.

As the role of computer software and network technologies is increasing with the improved technology day by day, therefore, the infringement of patentable subject matter is increased. Inventors need to have more attention of their legal rights, what can be protected and how their patent rights may be enforced.[3] However with the increase of computers, higher threshold for patent protection was enforced as it was put forward that computer programs represent a form of applied mathematics and full of unprecedented innovative qualities.[4]

Patenting is becoming the method of choice for effective protection of original computer programs. Whereas a copyright protects an original work in the tangible fixed form in which it has been set down, a patent protects the creation of inventive concepts as well as their reduction to practice. A patent owner has the right to prevent others from making, selling, or using a patented invention for twenty years from the filing date of the patent application. Patent law is applicable to inventions in any field of technology without discrimination, to be patentable, software-related inventions and business method-related inventions must also comply with the requirements.[5]

Increasingly software is being described as a collection of processes, as a unique machine, or both, enabling the protection of the inventive concepts behind an original program. In order to enjoy patent protection, an application for a patent shall comply with both formal and substantive requirements, and a patented invention shall be disclosed to the public. These requirements can be legally and technically complex, and their compliance often requires a legal expert's assistance. Compared with copy right protection, the term of protection is much shorter, namely, in general, 20 years from the filing date of the application.

JUDICIAL APPROACH

Getting the courts to shift towards this perspective has been a long road, and has generated a fair amount of confusion. Under copyright law, software is regarded as a 'literary work'. Obviously, copying a literary work is infringement, but the courts also view non-literal copying as infringement. If two works are not substantially similar in embodiment, then there is no infringement. Applying this vague rule to software is hindered by the lack of technical expertise amongst the legal community. The ambiguous nature of copyright can be seen by comparing the cases *Wheelan Associates Inc. v. Jaslow Dental Labs (1986)* and International, Inc. v. Altais, Inc. (1992). In the former case, the program in question was not completely original, it was deemed entirely copyright-protectable on the basis of its original structure and organization. In the latter case, non-original components were removed from the software before it could be protected by copyright.

The following cases highlight the gradual evolution of the legal mindset for patentable inventions. In *Gottschalk v. Benson (1946)*, an algorithm was rendered non patentable, but only because there was no particular application defined for the algorithm. In *Daimond v. Diehr (1981)* the process claim for operating machinery using a computer was upheld as patentable. The algorithm in question was patentable only in the context that it was used in conjunction with all of the other steps of the claimed process.

In *Data Cash System inc. v J.S. & A. Group*[6], it was held that for copyright protection, work must exist in tangible form in which it could be seen and read with the naked eyes. The court further held that computer program does not exist in this form therefore, not entitled for copyright protection.

However, *Apple Computer Corporation v Franklin Computer Corporation*[7], is the first landmark case for computer program protection as copyright. Apple Computer was one of the leading market sellers of a computer hardware and software. Franklin computer copied Apple Computer's operating system programs. Plaintiff filed a suit for infringement of copyright in computer software. The United States Court of Appeals determined that both program existing only in written form unreadable to human and one embedded on a ROM were protected by copyright. Thus operating systems were also copyrightable.

In *Cantor Fitzgerald v Tradition (UK)*[8], it was held that it is generally accepted that the 'architecture' of a computer program is capable of protection if a substantial part of the programmer's skill, labour and judgment went into it, and the term 'architecture' is capable of referring to the overall structure of the system at a very high level of abstraction including what was referred to 'program structure'.

INTERNATIONAL PROSPECTIVE

Article 10.1 of the TRIPS Agreement also provides that computer programs, whether in source or object code shall be protected as literary work.[9] Further Article 9.2 of TRIPS Agreement provides that copyright protection shall extend to expression and not to the idea, procedures, and methods of operations or mathematical concepts.[10] Section 2(o) of the Indian Copyright Act, 1957as amended in 1994 explains the scope of the term literary work as to include computer programs, tables and compilations including computer database. Therefore, the Act brings computer programs within the definition of a literary work and would therefore provide the same protection as would be available to a literary work.[11]

The United States Patent and Trademark Office's (USPTO) Official Gazette (no.11, 1989) published guidelines for software patenting, highlighting that a computer directed by a computer program is a statutory machine.[12] Recently, Patent Law allowed that computer software could be patented as a machine, because 'a general purpose computer becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.'[13]

CONCLUSION

In software, determining non obviousness is difficult, for in such a young field it is difficult to define what the appropriate level of ordinary skill actually is. Evaluating prior art is also complicated, because the prior art in software is often not documented in paper form. The recent trend shows, more and more programmers are finding patents to be the method of choice for software protection. The reason is that copy right protection extends only to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such. Although copyright protects the literal expression of computer programs, it does not protect the ideas underlying the computer program, which often have considerable commercial value. But due to the complex requirements for the grant of patents, the costs for obtaining and enforcing a patent may be costly. However, protection of software as patent is not substantiated by any law or treaty, the need for seeking legal protection as patent has been increased due to their importance and heavy competition in this field.[14] Therefore, it may be worth considering that patenting software related innovation may be proved the best way to protect software invention.

REFERENCES

1.   http://ftp.cordis.lu/pub/innovation-smes/docs/brochure_ipr_software_protection_en.pdf

2.   Wesley M. Cohen and Stephen A. Merrill (eds), Patents in the Knowledge- based Economy 253 (The National Academies Press, Washington, D.C., 2003).

3.   Agnieszka Kupzok, Enforcement of Patents on the Internet- Challenges, Trends, and Approaches, IIP Bulletin vol. 20, 2 (2011), available at https://www.iip.or.jp/e/e_summary/pdf/detail2010/e22_10.pdf visited on 10th February 2017.

4.   Jyoti Rattan, Cyber Law & Information Technology 507 (Bharat Law House, New Delhi, 4th Edition, 2014)

5.   Daehwan Koo, Patent and Copyright protection of Computer Programs, Intellectual Property Quarterly, No. 2 (2002).

6.   480 F Supp 1063 (ND III 1979)

7.   (1983) 14 F2d 1240.

8.   (2000) RPC 95

9.   Jyoti Rattan, Cyber Law & Information Technology 507 (Bharat Law House, New Delhi, 4th Edition, 2014)

10. The TRIPS Agreement, WTO Available on https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm   visited on 1st February, 2017.

11. S. S. Rana, Copyright law in India available at http://www.ssrana.in/Intellectual%20Property/Copyright/Copyright.aspx   visited on 3rd January 2014

12. 'Case Law of the Boards of Appeal of the European Patent Office' (European Patent Office)available at

     http://db1.european-patent-office.org/dwl/legal/case_law/clr_all_en.pdf visited on 1st February, 2017.

13. 'Intellectual Property on the Internet: A Survey of Issues' (WIPO), available at http://ecommerce.wipo.int/survey/index .html visited on 1st February 2017.

14. Jyoti Rattan, Cyber Law & Information Technology 507 (Bharat Law House, New Delhi, 4th Edition, 2014)